

**SEASONAL DISTRIBUTION OF SOME TENNESSEE
TABANINAE (DIPTERA, TABANIDAE).**

By L. L. PECHUMAN, Lockport, New York.

Through the kindness of Prof. Henry Dietrich of Cornell University, the writer recently had the opportunity of studying an extensive collection of Tabaninae collected in 1953 at Burrville, Morgan County, Tennessee, by Mr. Bernard Benesh.

Little is known of the tabanid fauna of Tennessee and it was intended originally to prepare a list of the species in this collection which had not previously been reported from that state. However, since some species were present in long series, representing collections made every day for a period in excess of three months, it was thought that a chart showing the seasonal distribution as represented in this collection would be a more effective way of presenting this information. Certain species were represented by small numbers and probably the collection records are of little significance in these cases; such species include *Tabanus americanus*, *atratus*, *fairchildi*, *lineola scutellaris*, *longus* and *moderator* and *Chlorotabanus crepuscularis*. In the case of other species, the series were so extensive that probably their true seasonal distribution is well indicated on the chart; such species include *Tabanus calens* (73 specimens), *fulvulus* (187 specimens) and *molestus mixis* (149 specimens). There were no males in the material studied.

A fairly long series of *Tabanus sagax* showed more variation than is usually associated with that species in the shape of the third antennal segment; this was fairly broad in some specimens. All the specimens of *Tabanus lineola* were a melanistic form of that species. The *Tabanus melanocerus* specimens were unusually large and dark and approached *lacustris* Stone in the extent of the dark coloration of the hind femora. However, the spur at the bifurcation of the third longitudinal vein, as is found in *lacustris*, was lacking with the exception of one specimen with almost completely dark femora where the spur was present in one wing only.

As is frequently encountered in long series, a number of *Tabanus sulcifrons* showed characters usually associated with *T. abdominalis* such as closed and petiolate first posterior cell and narrow frons. Only those specimens which met the following four criteria were considered to be *T. abdominalis*: very narrow frons, closed first posterior cell, no evident abdominal triangles and wholly black femora. Certain specimens showed as many as three of these

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	May 24 May 30	June 6 June 13	June 14 June 20	June 21 June 27	June 28 July 4	July 5 July 11	July 12 July 18	July 19 July 25	July 26 Aug. 1	Aug. 2 Aug. 8	Aug. 9 Aug. 15	Aug. 16 Aug. 22	Aug. 23 Aug. 29	Aug. 30 Sept. 5	Sept. 6 Sept. 12
<i>Tabanus lasiophthalmus</i> Macq.															
<i>Tabanus difficilis</i> Wied.															
<i>Hamatabanus carolinensis</i> (Macq.)															
<i>Tabanus pumilus</i> Macq.															
<i>Tabanus fulvulus</i> Wied.															
<i>Tabanus melanocerus</i> Wied.															
<i>Tabanus molestus mixis</i> Philip															
<i>Tabanus sagax</i> O. S.															
<i>Tabanus lineola</i> Fabr.															
<i>Tabanus molestus</i> Say															
<i>Leucotabanus annulatus</i> (Say)															
<i>Tabanus moderator</i> Stone															
<i>Tabanus longus</i> O. S.															
<i>Tabanus sulcifrons</i> Macq.															
<i>Tabanus americanus</i> Forst.															
<i>Tabanus nigripes</i> Wied.															
<i>Tabanus sparus milleri</i> Whitn.															
<i>Tabanus reinwardtii</i> Wied.															
<i>Tabanus fairchildi</i> Stone															
<i>Tabanus superjumentarius</i> Whitn.															
<i>Tabanus sackeni</i> Fairch.															
<i>Tabanus calens</i> L.															
<i>Tabanus abdominalis</i> Fabr.															
<i>Chlorotabanus crepuscularis</i> (Bequ.)															
<i>Tabanus lineola scutellaris</i> Walk.															
<i>Tabanus atratus</i> Fabr.															

- * *Tabanus lasiophthalmus* Macq.
- * *Tabanus difficilis* Wied.
- Hamatabanus carolinensis* (Macq.)
- * *Tabanus pumilus* Macq.
- Tabanus fulvulus* Wied.
- * *Tabanus melanocerus* Wied.
- Tabanus molestus mixis* Philip
- * *Tabanus sagax* O. S.
- Tabanus lineola* Fabr.
- Tabanus molestus* Say
- * *Leucotabanus annulatus* (Say)
- * *Tabanus moderator* Stone
- Tabanus longus* O. S.
- Tabanus sulcifrons* Macq.
- * *Tabanus americanus* Forst.
- * *Tabanus nigripes* Wied.
- * *Tabanus sparus milleri* Whitn.
- Tabanus reinwardtii* Wied.
- * *Tabanus fairchildi* Stone
- Tabanus superjumentarius* Whitn.
- Tabanus sackeni* Fairch.
- Tabanus calens* L.
- * *Tabanus abdominalis* Fabr.
- * *Chlorotabanus crepuscularis* (Bequ.)
- * *Tabanus lineola scutellaris* Walk.
- Tabanus atratus* Fabr.

* Species not previously recorded from Tennessee

characters in various combinations but were considered to be *T. sulcifrons*.

It is interesting to note that no specimens of subspecies *pallidescens* Philip were present in the 187 specimens of *T. fulvulus* examined although this form has been collected in Tennessee. There were no intergrades between the 27 specimens of *T. molestus* and 149 of subspecies *mixis*. The series of *T. molestus mixis* showed considerable variation in width and shape of frons and in the shape of the basal portion of the third antennal segment.

The cooperation of Prof. Dietrich and Mr. Benesh in making this interesting collection available is appreciated. I am indebted to Mr. William Wild of the Buffalo Museum of Science for the preparation of the accompanying distribution chart.

A STUDY OF THE BIOLOGY OF PRIOCNEMIS MINORATA BANKS (HYMENOPTERA, POMPILIDAE).

By CARL M. YOSHIMOTO,¹ Ithaca, New York.

In the spring of 1953, I had an opportunity to make several observations on the nesting habits of *Priocnemis* (*Priocnemis*) *minorata* Banks near Ithaca, N.Y. Most of my studies were made at Bull Pasture Pond, about two miles northeast of the Cornell University campus. The environment is a typical open oak-maple woodland with a pond nearby; part of the land has been cleared for a golf course. The ground is thickly covered with dry leaves and twigs where *P. minorata* nested. Two observations were made at McLean Wildlife Reservation, about 14 miles east of Ithaca, in a wooded area.

There have been no previous publications on the habits of this species, or any other member of this subgenus, in North America. My sincere thanks go to Dr. H. E. Evans for identification of the pompilid and some additional notes on its biology. I also wish to express my thanks to Dr. Willis J. Gertsch of the American Museum of Natural History for the identifications of the spiders.

The ten separate observations bear note numbers 401 through 410. Reference is made to these numbers in the text; the field notes and associated specimens are on file at Cornell University.

¹ Cornell University.